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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 1

**Complete if Known**

Application Number	10/799838
Filing Date	Mar 12, 2004
First Named Inventor	Randy Hoffman
Art Unit	2814
Examiner Name	Long Pham
Attorney Docket Number	200316548-1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
LP		US- 5,744,864	04-28-1998	Cillessen	
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

Examiner Signature	LONG PHAM	Date Considered	12/6/05
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**PATENT APPLICATION**

Sheet 1 of 6

<p><b>FORM PTO-1449</b></p> <p><b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b></p> <p>(Use several sheets if necessary)</p>	<p>ATTY. DOCKET NO. <b>200316548-1</b></p>	<p>APPLICATION NO.</p>	<p>CONFIRMATION NO.</p>
<p>APPLICANT <b>Randy L. Hoffman, et al.</b></p>			
<p>FILING DATE <b>Herewith</b></p>		<p>GROUP</p>	

**REFERENCE DESIGNATION                      U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
LP	1A	5,744,864	08/28/1998	Cillessen, et al.	
	1B	2003/0047785	03/13/2003	Kawasaki, et al.	
	1C	2003/0111663	06/19/2003	Yagi	
	1D	2003/0218221	11/27/2003	Wager, III, et al.	
	1E	2003/0218222	11/27/2003	Wager, III, et al.	
	1F	60/490,239	07/25/2003		Transparent Thin Film Transistor with Zinc-Tin Oxide Channel...
	1G	10/763,353	01/23/2004		Semiconductor Device
	1H	10/763,354	01/23/2004		Transistor Including a Deposited Channel Region Having a...
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	1J				
	1K				

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
LP	1L	WO 97/06544	02/20/1997	Cillessen, et al.		
LP	1M	EP1134811	06/19/2001	Kawasaki, et al.		
	1N					
	1O					
	1P					

**OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)**

LP	1Q	Aoki, Akira, et al., "Tin Oxide Thin Film Transistors", Japan J. Appl. Phys., Vol. 9, p.582 (1970).
	1R	Carcia, P.F., et al., "Transparent ZnO thin-film transistor fabricated by rf magnetron sputtering", Applied Physics Letters, Vol. 82, No. 7, pp. 1117-1119 (February 17, 2003).
	1S	Carcia, P.F., et al., "ZnO Thin Film Transistors for Flexible Electronics", Mat. Res. Soc. Symp. Proc., Vol. 769, pp. H72.1-H72.6 (2003).

<p>EXAMINER <b>Long PHAM</b></p>	<p>DATE CONSIDERED <b>12/06/05</b></p>
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## PATENT APPLICATION

Sheet 2 of 6

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	2L					
	2M					
	2N					
	2O					
	2P					

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

LP  ↓	2Q	Fu, Shelton, et al., "MOS and MOSFET with Transistion Metal Oxides", SPIE Vol. 2697, pp. 520-527.
	2R	Giesbers, J.B., et al., "Dry Etching of All-Oxide Transparent Thin Film Memory Transistors", Microeletronic Engineering, Vol. 35, pp. 71-74 (1997).
	2S	Grosse-Holz, K.O., et al. "Semiconductive Behavior of Sb Doped SnO2 Thin Films", Mat. Res. Soc. Symp. Proc., Vol. 401, pp. 67-72 (1996).

EXAMINER

Long PHAM

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12/6/05

**PATENT APPLICATION**

Sheet 3 of 6

<b>FORM PTO-1449</b>  <b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)	ATTY. DOCKET NO. <b>200316548-1</b>	APPLICATION NO.	CONFIRMATION NO.
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	3L					
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**OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)**

LP	3Q	Hoffman, R.L., et al., "ZnO-based transparent thin-film transistors", Applied Physics Letters, Vol. 82, No. 5, pp. 733-735 (February 3, 2003).
↓	3R	Masuda, Satoshi, et al., "Transparent thin film transistors using ZnO as an active channel layer and their electrical properties", Journal of Applied Physics, Vol. 93, No. 3, pp. 1624-1630 (February 1, 2003).
↓	3S	Nishi, Junya, et al., "High Mobility Thin Film Transistors with Transparent ZnO Channels", Jpn. J. Appl. Phys., Vol. 42, Part 2, No. 4A, pp. L347-L349 (April, 2003).

EXAMINER <div style="font-size: 2em; font-family: cursive;">Long Pham</div>	DATE CONSIDERED <div style="font-size: 1.5em; font-family: cursive;">12/6/05</div>
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## PATENT APPLICATION

Sheet 4 of 6

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	Randy L. Hoffman, et al.		
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	4L					
	4M					
	4N					
	4O					
	4P					

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

LP ↓	4Q	Ohya, Yutaka, et al., "Thin Film Transistor of ZnO Fabricated by Chemical Solution Deposition", Jpn. J. Appl. Phys., Vol. 40, Part 1, No. 1, pp. 297-298 (January, 2001).
	4R	Pallecchi, Ilaria, et al. "SrTiO3-based metal-insulator-semiconductor heterostructures" Applied Physics Letters, Vol. 78, No. 15, pp. 2244-2246 (April 9, 2001).
	4S	Prins, M. W. J., et al., "A ferroelectric transparent thin-film transistor", Appl. Phys. Lett., Vol. 68, No. 25, pp. 3650-3652 (June 17, 1996).

EXAMINER

Long Pham

DATE CONSIDERED

12/6/05

**PATENT APPLICATION**

Sheet 5 of 6

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	5N					
	5O					
	5P					

**OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)**

LP  ↓	5Q	Seager, C.H., et al., "Charge Trapping and device behavior in ferroelectric memories", Appl. Phys. Lett., Vol. 68, No. 19, pp. 2660-2662 (May 6, 1996).
	5R	Uneno, K., et al. "Field-effect transistor on SrTiO3 with sputtered Al2O3 gate insulator", Applied Physics Letters, Vol. 83, No. 9, pp. 1755-1757 (September 1, 2003).
	5S	Wöllenstein, Jürgen, et al., "An insulated gate thin-film transistor using SnO2 as semiconducting channel, a possible new gas sensor device" The 11th European Conference on Solid State Transducers, pp. 471-474 (September 21-24, 1997).

EXAMINER

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DATE CONSIDERED

12/6/05

## PATENT APPLICATION

Sheet 6 of 6

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	6L					
	6M					
	6N					
	6O					
	6P					

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

LP ↓ ↓	6Q	Yoshida, A., "Three Terminal Field Effect Superconducting Device Using SrTiO <sub>3</sub> Channel" IEEE Transactions on Applied Superconductivity, Vol. 5, No. 2, pp. 2892-2895 (June, 1995).
	6R	Solid-State Electronics, Vol. 7, Pergamon Press, Notes pp. 701-702 (1964).
	6S	Anonymous, "Transparent and/or memory thin film transistors in LCD's and PLED's" Research Disclosure, p. 890 (July 1998).

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DATE CONSIDERED

12/6/05